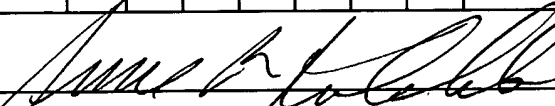
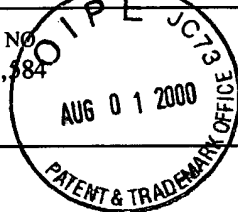
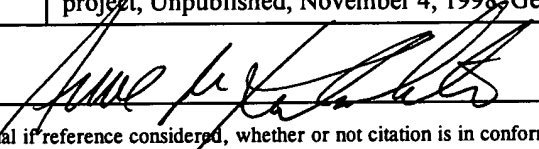
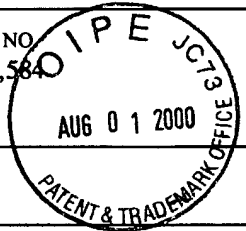
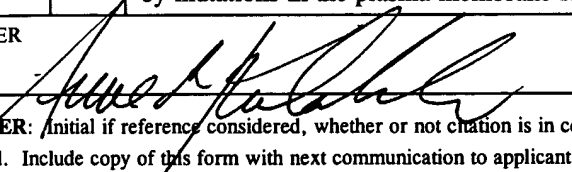


#6 cont

Modified USPTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 4001		SERIAL NO. 09/271,584								
REFERENCES DISCLOSED BY APPLICANT				APPLICANTS BLUMWALD, Eduardo et al										
				FILING DATE March 18, 1999		GROUP 1649-1638								
U.S. PATENT DOCUMENTS														
EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
ARIC	AA	4	6	1	6	1	0	0	Oct. 7, 1986	McHughen et al.	800	001	Jan. 26, 1984	
	AB	5	8	5	9	3	3	7	Jan. 12, 1999	Gasser and Lippuner	800	205	June 6, 1995	
	AC	5	7	8	0	7	0	9	July 14, 1998	Adams et al.	800	205	Jan. 19, 1996	
	AD	5	5	6	3	3	2	4	Oct. 8, 1996	Tarczynski et al.	800	205	Jan. 25, 1994	
	AE	5	6	3	9	9	5	0	June 17, 1997	Verma et al.	800	205	June 19, 1994	
	AF	5	6	8	9	0	3	9	Nov. 18, 1997	Becker and Stacey	800	205	March 16, 1994	
	AG	5	3	4	6	8	1	5	Sept. 14, 1994	Krulwich and Ivey	435	069.1	Aug. 28, 1992	
	AH	5	5	6	3	2	4	6	Oct. 8, 1996	Krulwich and Ivey	435	69.1	Sept. 9, 1994	
ARK	AI	5	2	7	2	0	8	5	Dec. 21, 1993	Young & Jia	435	254.2	Oct. 31, 1989	
FOREIGN PATENT DOCUMENTS														
		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
ARK	AJ	9	1	0	6	6	5	1	16-May-1991	WO	C12N	15/31		
1	AK	9	7	1	3	8	4	3	01-10-1996	WO	C12N	00500		
ARIC	AL	9	6	3	9	0	2	0	31-05-1996	WO	A01H	00500		
EXAMINER										DATE CONSIDERED				
										3/28/99				
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Modified USPTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 4001	SERIAL NO. 09/271,384
REFERENCES DISCLOSED BY APPLICANT				
			APPLICANTS BLUMWALD, Eduardo et al	
			FILING DATE March 18, 1999	GROUP 1649 1635
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)				
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)				
ARK	AM	Barkla, B.J., Apse, M.P., Manolson, M.F. et al. The plant vacuolar Na <sup>+</sup> /H <sup>+</sup> antiport, <i>Society for Experimental Biology</i> , 141-153, 1994. In: <i>Membrane Transport in Plants and Fungi: Molecular Mechanisms and Control</i> , Blatt et al., ed. The Company of Biologists Ltd, Cambridge, UK		
	AN	Dante, M., Wamsley, P. and Gibson, A. Sequence 457 AA; 50611 MW, Embl database, 1997.		
	AO	Newman, T., deBruijn, F.J., Green, P. et al. Genes galore: a summary of methods for accessing results from large-scale partial sequencing of anonymous <i>Arabidopsis</i> cDNA clones, <i>Plant Physiol</i> , 106: 1241-1255, 1994. (Also GenBank Accession No. T75860).		
	AP	Borgese, F., Sardet, C. and Cappadoro, M. et al. Cloning and expression of a cAMP-activated Na <sup>+</sup> /H <sup>+</sup> exchanger: evidence that the cytoplasmic domain mediates hormonal regulation, <i>Proceedings of the National Academy of Sciences of the United States of America</i> 89: 6765-6769, 1992.		
	AQ	Ohki R., Oishi, M. and Kiyama, R. Preference of recombination sites involved in the formation of extrachromosomal copies of the human alphoid Sau3A repeat family, <i>Nucleic Acids Res.</i> , 23: 4986-4991, 1995.		
	AR	Barkla, B.J., Zingarelli, L., Blumwald, E. et al. Tonoplast Na <sup>+</sup> /H <sup>+</sup> antiport activity and its energization by the vacuolar H <sup>+</sup> -ATPase in the halophytic plant <i>Mesembryanthemum crystallinum</i> L <sup>1</sup> , <i>Plant Physiol.</i> , 109: 549-556, 1995.		
	AS	Schachtman, D.P., Kumar, R., Schroeder, J.I. et al. Molecular and functional characterization of a novel low-affinity cation transporter (LCT1) in higher plants, <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 94: 11079-11084, 1997.		
	AT	Bohnert, H.J. and Jensen, R.G. Strategies for engineering water-stress tolerance in plants, <i>Trends in Biotechnology</i> , 14: 89-97, 1996.		
	AU	Rausch, T., Kirsch, M., Low, R. et al. Salt stress responses of higher plants: the role of proton pumps and Na <sup>+</sup> /H <sup>+</sup> -antiporters, <i>Journal of Plant Physiology</i> , 148: 425-433, 1996.		
	AV	Gaxiola, R.A., Rao, R., Sherman, A. et al. The <i>Arabidopsis thaliana</i> proton transporters, AtNhx1 and Avp1, can function in cation detoxification in yeast, <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 96: 1480-1485, 1999. (GenBank Accession No. AF106324 (DNA) and 4324597 (protein))		
J	AW	Apse, M.P., Aharon, G.S., Snedden, W.A. et al. Salt tolerance conferred by overexpression of a vacuolar Na <sup>+</sup> /H <sup>+</sup> antiport in <i>Arabidopsis</i> , <i>Science</i> , 285: 1256-1258, 1999.		
ARK	AX	Murphy, L. and Harris, D. et. al. Direct submission schizosaccharomyces pombe chromosome I sequencing project, Unpublished, November 4, 1998, GenBank Accession No. 3850064.		
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REFERENCES DISCLOSED BY APPLICANT				
			APPLICANTS BLUMWALD, Eduardo et al	
			FILING DATE March 18, 1999	GROUP 1649 1638
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)				
ARK	AY	Dietrich, F.S. et al., The sequence of <i>S. cerevisiae</i> lambda 3641 and cosmids 9461, 9831, and 9410, GenBank Accession No. 927695, 27-AUG-1997.		
1	AZ	Sasaki, T. et al., Rice cDNA from panicle, GenBank Accession No. C91832, 20-APR-1998.		
	BA	Sasaki, T. et al., Rice cDNA from panicle, GenBank Accession No. C91861, 20-APR-1998.		
ARK	BB	Yamamoto, K. et al., Rice cDNA from green shoot, GenBank Accession No. AU032544, 20-OCT-1998.		
	BC	Gaxiola, R. A. et al., The <i>Arabidopsis thaliana</i> proton transporters, AtNhx1 and Avp1, can function in cation detoxification in yeast, GenBank Accession No. AF106324 (DNA), 28-FEB-1999 (submitted by the authors of the following publication: Proc. Natl. Acad. Sci. U.S.A. 96 (4), 1480-1485 (1999).		
	BD	Gaxiola, Roberto A. et al., The <i>Arabidopsis thaliana</i> proton transporters AtNhx1 and Avp1 can function in cation detoxification in yeast. Proc. Natl Acad. Sci., USA, 96:1480-1485 (1999).		
	BE	Newman T. et al., Genes galore: a summary of methods for accessing results from large-scale partial sequencing of anonymous <i>Arabidopsis</i> cDNA clones, GenBank Accession No. T75860 (EST) 04-AUG-1998		
ARK	BF	Covitz, P.A. et al., Expressed sequence tags from a root hair-enriched <i>Medicago truncatula</i> cDNA library, GenBank Accession No. AA660573, 10-NOV-1997.		
	BG	Kadyrzhanova, D. et al., Sequences for STS primer sets, GenBank Accession No. L44032, 27-JUL-1995.		
	BH	Blumwald, Eduardo et al., Cloning of plant sodium/proton antiports in <i>Arabidopsis</i> . Eastern Regional Meeting of the Canadian Society of Plant Physiologists, Toronto (Dec. 1998).		
	BI	Blumwald, Eduardo et al., Cloning and characterization of a plant sodium/proton antiport. Annual Meeting of the American Society of Plant Physiologists, Madison, USA (Jun. 1998)		
	BJ	Blumwald, Eduardo et al., Cloning and characterization of a plant sodium/proton antiports. 11 <sup>th</sup> Int'l Workshop on Plant Membrane Biology, Cambridge, UK (Aug. 1998).		
	BK	Blumwald, Eduardo et al., Cloning and characterization of a plant sodium/proton antiports. Gordon Conference on Drought and Salinity Stress in Plants, Oxford, UK (Aug. 1998).		
	BL	Darley, Catherine P. et al., ANA1 a Na <sup>+</sup> /H <sup>+</sup> antiporter from <i>Arabidopsis</i> ? 11 <sup>th</sup> Int'l Workshop on Plant Membrane Biology, Cambridge, UK (Aug. 1998).		
ARK	BM	Nass, Richard et al., Intracellular sequestration of sodium by a novel Na <sup>+</sup> /H <sup>+</sup> exchanger in yeast is enhanced by mutations in the plasma membrane H <sup>+</sup> -ATPase. Biological Chemistry, 272:26145-26152 (1997).		
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